Montana Fish, Wildlife & Parks

ENVIRONMENTAL ASSESSMENT DECISION NOTICE

Introduction of Sterile Tiger Muskellunge into Willow Creek Reservoir as a Biological Control to Reduce an Expanding White Sucker Population

Region 4
4600 Giant Springs Road
Great Falls, MT 59405-0901
September 10, 2014

Proposed Action

Montana Fish, Wildlife and Parks (FWP) proposed to introduce tiger muskies into Willow Creek Reservoir as a biological control to reduce an expanding white sucker population. The increase in white sucker abundance in the reservoir has lead to a decline in the quality of the rainbow trout fishery, which subsequently has lead to a reduction in angler use.

The introduction of tiger muskies was proposed as a biological control of the white sucker population because they are a sterile hybrid (F1 hybrids of female muskellunge *Esox masquinongy* and male northern pike *E. lucius*). Because they cannot reproduce, the abundance of tiger muskies in the reservoir can be closely managed by adjusting stocking rates and/or angling limits, mechanical removal of individuals, or through natural attrition of the population.

Tiger muskies are effective predators that prefer large, soft-rayed prey. They grow very quickly and can attain large sizes that can provide a unique trophy fishing opportunity for anglers. Since the late 1980's, tiger muskies have been introduced into 18 waterbodies in Montana with no deleterious effects.

Montana Environmental Policy Act

FWP is required to conduct a comprehensive evaluation of stocking fish not indigenous to a waterbody according to Administrative Rule of Montana 12.7.601(4). This assessment is accomplished through the Montana Environmental Policy Act (MEPA). In compliance with MEPA, an Environmental Assessment (EA) of the proposed project was completed by FWP and released for public comment on June 3, 2014.

Public comments on the proposed project were accepted for 30 days through July 3, 2014. A press release soliciting comments on the EA was printed in the Helena Independent, Great Falls

Tribune, and Choteau Acantha newspapers. The draft EA was posted on the FWP webpage: http://fwp.mt.gov/news/publicnotices/.

Summary of Public Comment and FWP Response

A total of 25 comments were received on the draft Environmental Assessment. Twenty-two of these comments were supportive of the Preferred Alternative to introduce tiger muskies into Willow Creek Reservoir. Of the three other comments received, two supported the No Action Alternative and the other comment did not address any of the alternatives outlined in the EA. Specific comments and FWP's responses are as follows:

Comment 1. Please do not release Tiger Muskie into Willow Creek. Sterile hybrid stock may contain fertile hybrids or pure strain Pike and Muskie. This is a serious hazard to the trout fishery at Willow Creek. White sucker competition does not warrant the risk of introducing a trout predator to the lake.

> *Response.* Tiger muskies have been widely cultured and researched with no documented cases of reproduction ever occurring; their sterility is certain. If there was any risk of tiger muskies establishing a self-sustaining population this proposal would not be considered.
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> Because of the process in which the hybrids are cultured (crossing a female muskellunge with a male northern pike), it is not possible that pure strain pike or muskie could be inadvertently stocked with the hybrids.

Comment 2. (Paraphrased) I am not sure FWP should introduce tiger muskie in Montana without understanding their reproductive cycle and the appetite these fish have.

> *Response.* See response above for explanation on the reproductive potential of tiger muskies.
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> The effectiveness of tiger muskies in preying on larger, soft rayed fish such as suckers has been well documented in other waters in Montana. It is this effectiveness and their inability to reproduce that makes them an ideal predator to consider for introduction into Willow Creek Reservoir. The key to the success of this introduction is to maintain a proper balance between the tiger muskie and white sucker populations thus that the rainbow trout fishery is not negatively impacted by predation. FWP is committed to closely monitoring these populations to meet the objectives of this introduction.

Comment 3. (Paraphrased) Here's my comment on the Willow Creek Reservoir proposals:

1) Forget the put and take rainbows.
2) Plant perch and walleyes, and spottails

> *Response.* Willow Creek Reservoir provides a popular rainbow trout fishery for both shore and boat anglers. At this time, FWP does not propose changing management direction on this waterbody. The suggested introduction of perch, walleye and spottail shiners is beyond the scope of this EA.

Additional Information

The introduction of tiger muskie in Willow Creek Reservoir would not only serve to reduce sucker numbers to improve the trout fishery, but also provide a unique opportunity to harvest a fish species not common to this area. The standard Central District daily and possession limit for tiger muskellunge would apply, which is 1 daily and in possession with a 40 inch minimum. As such, tiger muskellunge would not be available for angler harvest for an estimated five to six years until the fish in this population reach 40 inches in length.

Decision

Based on the Environmental Assessment, public comments, and FWP's evaluation of the risks and benefits associated with the project, it is my decision to proceed with the Preferred Alternative (Alternative C) to introduce tiger muskies into Willow Creek Reservoir with the objective to improve the rainbow trout fishery.

I find there to be no significant impacts on the human and physical environments associated with the proposed action. Therefore, I conclude the Environmental Assessment is the appropriate level of analysis, and that an Environmental Impact Statement is not required.

Gary Bertellotti
FWP Region 4 Supervisor